Planning

Total Time: 12 Weeks

(6.19 -- 8.28)

Step 1: planning, background and reading

Time: 1 week (6.19 -- 6.25)

1. Writing Plan (1 day)
2. Search material and finish the background (1 - 2 days)
3. Reading the tutorial about OpenCL API and SDL API (the rest time)

Step 2: design and development

Time: 3 weeks (6.26 -- 7.16)

1. Reading and understanding the source code about the plain C uxn VM. (2 - 3 days)
2. Communicating with the supervisor to clarify any unclear aspects and determine which parts are relatively **easier to start with.** (1 - 2 days)
3. Coding the system (the rest time)
4. Writing scripts which about Compilation and Execution (the rest time)

Step 3: Testing

Time: 2 weeks (7.17 -- 7.30)

1. Searching for research papers and materials on how to test a VM (as I have no prior experience in testing virtual machine systems) (0.5 weeks)
2. Run and test this system on multiple platforms, including GPUs, CPUs, etc. (the rest time)
3. Distribute this system to fellow group members who use it for their projects. Request them to use it and provide feedback on its usage. (Proceed with both tasks simultaneously)
4. Search for methods for comparing carbon consumption across different platforms and use this system for comparison. (0.5 weeks)

Step 4: Report/paper

Time: 2 weeks (7.31 -- 8.13)

1. Finish the Background, System Explanation, Important Code Explanation, and Testing part and Finalize Draft (1 week)
2. Revise and Refine (1 week)

Step 5: More

I don't know if there is a possibility of publishing this project in a journal in the end (I have only attempted to publish in a Chinese journal once before, and I know that the process can be particularly challenging) or if additional work needs to be done. I hope to do better.